



7-7-81

Gordon Edison,

In response to your question on rainfall and runoff, for WCGS cooling lake, the following tables were generated.

The runoff table was derived from FSAR Site addendum Table 2.4-22 with the values modified to account for the cooling lake area

$$\left[\frac{\text{Wolf Creek drainage area near dam} - \text{cooling lake area}}{\text{Wolf Creek drainage area near dam}} \right].$$

The average monthly Runoff from this table is 8.45 CFS

Precipitation (or runoff) flow rate is ~~derived~~ derived from 3-hr data from the Chanute Weather data tape with the data as input to LAKET program. This gives the attached table for Precipitation flow rate.

The average ^{monthly} precipitation flow rate from this table is 18.88 CFS.

Add: Gordon Edison 10/1

Precipitation flow rate + runoff gives

$$8.45 \text{ CFS} + 18.88 \text{ CFS} = 27.33 \text{ CFS.}$$

COO2
5/1/1

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Wolf Creek Station - Units 1 & 2

Monthly Average Cooling Lake
Precipitation Flow Rate, cfs, From 1949 to 1964

Year	Jan.	Feb.	March	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1949	39.76	17.05	19.02	15.85	30.51	32.73	53.67	10.49	44.11	17.54	1.07	15.27
1950	3.80	8.11	6.63	15.85	34.14	34.94	72.22	45.06	15.34	1.19	.36	.28
1951	8.50	20.59	9.95	31.30	33.77	81.29	74.46	56.72	59.78	17.76	16.96	3.89
1952	5.73	7.83	28.94	22.29	10.91	3.78	26.31	26.42	3.10	.00	18.10	4.34
1953	1.09	8.67	22.11	17.92	24.20	27.28	21.67	4.66	20.89	20.20	13.68	7.32
1954	1.62	8.19	5.92	50.63	29.71	8.13	2.07	14.04	21.68	32.67	.07	11.72
1955	8.57	18.57	11.68	11.83	40.87	27.65	5.90	2.04	59.94	9.91	.14	1.69
1956	6.71	5.29	4.01	12.26	53.83	15.35	31.01	18.25	1.32	15.18	15.53	5.80
1957	4.91	16.74	13.81	22.42	56.95	56.40	14.30	4.55	26.99	26.97	17.34	11.81
1958	5.59	6.42	34.18	22.63	28.54	50.76	66.01	13.14	49.16	.07	9.85	4.90
1959	.21	.00	9.32	13.28	29.14	15.63	42.50	22.02	14.34	47.76	.64	4.14
1960	8.84	12.84	8.42	27.29	28.95	14.55	26.73	34.25	3.49	43.60	.00	.00
1961	.00	.00	15.51	37.57	62.42	12.58	11.05	17.68	80.40	18.04	.00	6.01
1962	10.15	5.50	17.49	2.71	20.42	45.33	21.40	14.82	63.96	4.84	11.85	2.76
1963	5.73	.92	17.96	1.28	10.98	24.27	17.99	5.86	9.70	4.35	9.42	1.66
1964	4.14	5.31	8.36	37.77	31.88	39.33	7.11	39.20	14.55	3.45	.00	.00

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CHICAGO, ILLINOIS



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Wolf Creek Station - Units 1 & 2

Monthly Average Cooling Lake
Runoff Flow Rate, cfs, From 1949 to 1964

Year	Jan.	Feb.	March	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1949	21.40	32.10	9.30	10.90	18.90	8.20	8.60	1.80	1.20	4.10	.90	.80
1950	1.70	.90	.90	2.00	6.10	12.90	36.20	41.70	7.50	2.00	1.00	.90
1951	.80	1.40	2.70	10.10	48.40	48.40	204.00	12.50	56.30	7.30	6.90	2.90
1952	2.90	2.30	17.70	23.10	8.50	1.60	.80	2.00	.30	.10	.30	.40
1953	.40	.40	1.00	1.10	1.90	.80	.60	.10	.00	.00	.00	.10
1954	.10	.10	.10	.50	1.60	4.80	.10	.30	.00	.40	.00	.00
1955	.10	.70	.60	3.20	5.00	2.50	3.00	.20	1.20	1.50	.10	.10
1956	.10	.10	.10	.50	1.40	.40	.10	2.30	.00	.00	.00	.00
1957	.00	.00	.60	11.50	38.40	19.30	3.70	.30	2.10	4.40	5.70	1.80
1958	2.50	6.00	30.40	10.20	6.20	13.60	39.80	4.10	10.60	4.90	5.00	1.60
1959	2.10	4.00	3.20	7.70	20.90	3.90	33.10	3.00	1.60	33.40	3.10	4.10
1960	6.90	11.70	34.00	16.00	8.10	7.40	1.90	7.70	2.70	13.80	7.00	7.00
1961	2.20	9.80	21.30	24.60	69.30	13.00	10.40	2.30	22.50	15.60	26.00	5.10
1962	15.50	17.80	13.00	4.80	7.20	24.40	4.70	2.00	38.20	7.80	3.00	2.40
1963	2.90	1.90	7.50	2.10	1.60	3.90	2.60	.30	.20	.50	.30	.30
1964	.30	.30	.40	9.70	4.90	11.00	.60	1.50	.70	.10	4.60	2.10